UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,918	01/26/2004	Michael F. Angelo	200314543-1	2632

22879   7590   09/21/2007

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
DOAN, DUC T

ART UNIT	PAPER NUMBER
2188	

MAIL DATE	DELIVERY MODE
09/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/764,918	ANGELO ET AL.
	Examiner	Art Unit
	Duc T. Doan	2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 July 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-28 and 31-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>27 and 28</u> is/are allowed.

6)☒ Claim(s) <u>1-26 and 31-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set for in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.1 14, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.1 14. Applicant's submission filed on 7/23/07 has been entered.

Claims 1-34 have been presented for examination in this application. In response to the last office action, claims 29-30 have been canceled. As the result, claims 1-28,31-34 are now pending in this application.

Claims 27-28 are allowed.

Claims 1-26,31-34 are rejected.

Applicant's arguments filed 7/23/07 have been fully considered but they are mooted in view of new ground(s) of rejection necessitated by the Applicant's amendments to the claims.

Claim Rejection 35 USC 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-13, 14-20 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8, 14 direct to a security module which is a software/program (see

specification's paragraph 21). Therefore, the claimed invention is directed to non-

statutory subject matter.

All dependent claims are rejected as having the same deficiencies as the claims

they depend from.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set

forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-26,31,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's admitted prior art (APA) and in view of Challener (US Pub 2003/0174842).

As in claim 1, APA discloses a method of operating security modules in a

computer including having a first security module and a second security module both of

them are configured to perform the same functions, that is the functions associating with

a security module (APA's paragraph 4, two security modules configured to perform the

same security functions such as encrypting, sealing etc..).

APA does not disclose the claim's details associating with the keys of security

modules, However, Challener'842 describes a method for storing private key of one

security in another security module using establish standard such as TCPA (Challener's

paragraph 6, lines 1-10) comprising the acts of: detecting a second security module in the

computer; determining whether a key associated with the second security module is

available to the first security module (Challener'842's paragraph 28, Fig 3: #54 query

whether user's private key is stored on the TCM server, Fig 1: #40 that corresponds to the

claim's first security module); and obtaining the key associated with the second security

module if the key associated with the second security module is not stored at the first

security module (Challener'842's paragraph 28, server obtains the private key from the

client's security module, Fig 1: #54 that corresponds to the claim's second secure

module, Fig 1: #22; Challener's paragraph 12 discloses that the first security module,

TCM server Fig 1: #40, obtaining the private key associating with the second security

module, Fig 1: #22, and providing this key information to a client/user. Obviously, if this

key has not been stored at the first security module, the first security module, server, will

obtain it from the client's computer and save it for future referencing, in a migrating

manner, see Fig 4a, and paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of

invention to include the method and associating apparatus for storing private key of one

security in another security module using establish standard such as TCPA in APA's

system, thereby the private key of one security module can be retrieved from another

security safely with any computers enable with established standard such as TCPA (see

Challener's paragraph 8).

As in claim 2, Challener further discloses wherein each of the first security module and the second security module is a trusted platform module ("TPM") (Challener'842's paragraph 26 describes the server TPM Fig 1: # 40 including modules conforming to the trusted platform module specification (see Challener'842's paragraph 6); Challener'842 paragraph 12 further disclose the TCPA is employed in the second security module, for example Fig 1: #22).

As in claim 3, Challener'842's paragraph 28 further describes comprising the act of requesting the key from the second security module (claim 3; requesting private key from client's system Fig 1: 312).

As in claim 4, Challener further discloses the act of sending a public key from the first security module to the second security module if the key associated with the second security module is not stored at the first security module (Challener'842's paragraph 28 discloses when the user's private key is not stored in the first security module (Fig 1: #40 TPM server), the server Obviously send the public key (public non-migratable key of the server) to the second security module which being used to "wrap" the private key, and the second security module sends this wrapped information back to the TPM server).

As in claim 5, Challener further discloses the act of sending a public key along with validation information from the first security module to the second security module if the key associated with the second security module is not stored at the first security module (Challener'842's paragraph 31 discloses for both the requesting and responding messages, additional information to validating the messages can be sent along, for example, information associating with authorization for the sender of messages) .

As in claim 6, Challener further discloses the act of storing the key in a memory

associated with the first security module (Challener'842 Fig 1: #48, #50).

As in claim 7, Challener further discloses the act of defining the key to be a

private key (Challener'842's paragraphs 24, 27).

Claims 8,14,21,31 rejected based on the same rationale as in the rejection of claim

1.

Claims 9,15,22,32 rejected based on the same rationale as in the rejection of claim

2.

Claims 10,16,23 rejected based on the same rationale as in the rejection of claim

3.

Claims 11-12,17-18,24-25 rejected based on the same rationale as in the rejection

of claims 4-5 respectively.

Claim 19 rejected based on the same rationale as in the rejection of claim 6.

Claims 13,20,26 rejected based on the same rationale as in the rejection of claim

7.

Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over

APA and Challener (US Pub 2003/0174842) as applied to claims 1 and 8 respectively,

and in view of Dickinson et al (US 7187771).

As in claim 33 Challener further discloses comprising the act of accessing data

encrypted by the second security module using the key associated with the second

security module (Challener discloses a method in which a first secure module (Fig 1:

#40) can access data encrypted by the second security module using the key associated

with second security module (Challener's Fig 3: #60-64, paragraph 31, the stored private key (corresponding to the claim's data) is encrypted using non-migratable public key (corresponding to the claim's key associating with the second security module), and returning the user's private key/data to the client). In other words, Challener teaches a method in which a first security module can retrieve a data associating with the second security module by using the stored key associated with the second security module and presenting the data to the user. APA and Challener do not expressly disclose the aspect of the claim's regarding the failure of the second security module. However, Dickinson discloses a method in which important data is controlled by secure/trust module logic (see Abstract, Fig 2). Dikinson further discloses that the secure/trust system comprises several redundancy engines authenticate engines, trusted engines (see Dickenson's column 5 lines 60-67, column 13 line 46 to column 14 line 3, trust engines perform authenticate functions), which control several redundant copy of critical data, such that the failure of one module/one component would not affect the overall secure system.

It would have been obvious to one of ordinary skill in the art at the time of invention to include the redundant method for storing copies of data controlled by redundant secure/trusted modules in APA's system modified by Challener and thereby if one of the secure module fails, the data can be obtained from the remaining secure modules and other copies of data (see Dickinson's column 17 lines 46-61).

Claim 34 is rejected based on the same rationale as of claim 33.

Response to Arguments

Applicant's arguments in response to the last office action has been fully considered but they are not persuasive. Examiner respectfully traverses Applicant's arguments for the following reasons:

A) Regarding Applicant's remarks at pages 10-13 for the rejections of claims 8-20 under 35 U.S.C 101,

Examiner maintains the claims 8 and 14 directs to the security module, which is a software/program (see specification's paragraph 21). Therefore, the claimed invention is directed to non-statutory subject matter.

Furthermore, there is no limitation in the claim that qualifies security module which implies a software/program (see specification's paragraph 21, lines 1-2) to be embodied in a tangible medium.

All dependent claims are rejected as having the same deficiencies as the claim(s) they depend from.

B) Regarding Applicant's remarks at pages 13-19 for the rejections of claims 1-26,31-32 under 35 U.S.C. 103(a), Applicant's arguments are mooted in view of new ground(s) of rejection necessitated by the Applicant's amendments to the claims.

C) Regarding Applicant's remarks at page 17-18 for the rejections of dependent claims 2-7,9-13,15-20,22-26 and 32-34.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

When responding to the office action, Applicant is advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Doan whose telephone number is 571-272-4171. The examiner can normally be reached on M-F 8:00 AM 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

HYUNG SOUGH
SUPERVISORY PATENT EXAMINER

9/17/07